

**In the Claims:**

Claim 31. A method for quantifying an analyte in a specimen, said method comprising the steps of:

- a) combining said specimen with an internal references species (IRS) of known concentration, in order to calibrate all subsequent steps; whereby said combination is referred to as an IRS-containing specimen;
- b) combining said IRS-containing specimen with an affinity reagent, capturing and isolating said analyte and said IRS, wherein said IRS is a modified analyte with shifted molecular weight which binds to said affinity reagent;
- c) quantifying said analyte wherein quantifying comprises using mass spectrometric analysis to resolve distinct signals for said analyte and said IRS to determine the ratio of the analyte signal to the IRS signal.

Claim 32. (WITHDRAWN)

Claim 33. A method according to claim 31, in which said quantifying step further comprises working curve analysis.

Claim 34. (WITHDRAWN)

Claim 35. (WITHDRAWN)

Claim 36. (WITHDRAWN)

Claim 37. (WITHDRAWN)

Claim 38. (WITHDRAWN)

Claim 39. (WITHDRAWN)

Claim 40. A method according to claim 33, in which said working curve analysis comprises substeps of:

- a) making a plurality of standard preparations, each containing a known but differing concentration of the analyte and each containing a known concentration of IRS;
- b) obtaining respective mass spectra of each of the plurality of standard preparations;

- c) normalizing each of the mass spectra from the plurality of standard preparations by dividing each mass spectrum by the IRS signal within the mass spectrum;
- d) creating a working curve by equating the normalized analyte signals to the analyte concentration of the plurality of standard preparations;
- e) obtaining a mass spectrum for the IRS-containing specimen;
- f) normalizing the mass spectrum of the IRS-containing specimen by dividing by the IRS signal within the mass spectrum; and
- g) quantifying the concentration of the analyte in the specimen using the working curve.

Claim 41. (CANCELLED)

Claim 42. (WITHDRAWN)

Claim 43. (WITHDRAWN)

Claim 44. (WITHDRAWN)

Claim 45. (WITHDRAWN)

Claim 46. (WITHDRAWN)

Claim 47. (WITHDRAWN)

Please add the following new claims:

Claim 48. (NEW) A method for quantifying a protein in a specimen, said method comprising the steps of:

- a) combining said specimen with an internal reference species (IRS) of known concentration, in order to calibrate all subsequent steps; whereby said combination is referred to as an IRS-containing specimen;
- b) combining said IRS-containing specimen with an affinity reagent, capturing and isolating said protein and said IRS, wherein said IRS is a modified protein with shifted molecular weight which binds to said affinity reagent; and

c) quantifying said protein wherein quantifying comprises using mass spectrometric analysis to resolve distinct signals for said protein and said IRS to determine the ratio of the protein signal to the IRS signal.

Claim 49. (NEW) A method according to claim 48, in which said quantifying step further comprises working curve analysis.

Claim 50. (NEW) A method according to claim 49, in which said working curve analysis comprises substeps of:

a) making a plurality of standard preparations, each containing a known but differing concentration of the protein and each containing a known concentration of IRS;

b) obtaining respective mass spectra of each of the plurality of standard preparations;

c) normalizing each of the mass spectra from the plurality of standard preparations by dividing each mass spectrum by the IRS signal within the mass spectrum;

d) creating a working curve by equating the normalized protein signals to the protein concentration of the plurality of standard preparations;

e) obtaining a mass spectrum for the IRS-containing specimen;

f) normalizing the mass spectrum of the IRS-containing specimen by dividing by the IRS signal within the mass spectrum; and

g) quantifying the concentration of the protein in the specimen using the working curve.